

Attorney Docket No. A-72075/RMS/VEJ Attorney Matter No. 469249-00405 Application No. 10/762,931

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

David Louis HEINER et al.

Application No. 10/762,931

Filed: **January 21, 2004**

For: CHEMICAL REACTION MONITOR

Art Unit: 1645

Examiner: To be assigned

Docket No.: A-72075/RMS/VEJ

Certificate of Mail (37 C.F.R. § 1.8(a))

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ent Yorehara

Mail Stop AMENDMENT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is hereby submitted in accordance with 37 CFR 1.98 and pursuant to Applicant's continuing duty under 37 CFR 1.56 to bring any information which may be material to patentability of this application to the Examiner's attention. The Examiner's attention is directed to the reference(s) cited on the accompanying substitute for form PTO-1449A/PTO. Copies of all U.S. patents and U.S. published applications are not enclosed. See Notice of August 5, 2003, 1273 OG 1-14. Copies of the cited references are enclosed. It is further understood that the Examiner will also consider information that was cited or submitted to the U.S. Patent and Trademark Office in a prior application relied on under 35 U.S.C. § 120. Notice of April 20, 1992, 1138 OG 37-41, at 37; M.P.E.P. § 609 (I)(A)(2).

Applicant submits that reference no. B1 is not in the English language and directs the Examiner's attention to the English language abstract of same enclosed herewith for a concise statement as to its relevance. 37 C.F.R. § 1.98(a)(3) and M.P.E.P. § 609(III)(A)(3).

Applicant certifies that the references listed on the enclosed substitute for form PTO-1449 marked with an asterisk (*) were first cited in an International Search Report dated July 16, 2004, for counterpart PCT application PCT/US2004/001646. A copy of the International Search Report for the counterpart PCT application is enclosed herewith. 37 C.F.R. §§ 1.97(c) and 1.97(e)(1).

Applicant makes no representation that a search has been conducted by the Applicant, or that there is not possibly more relevant art. Applicant also makes no representation that the information submitted herewith is in fact material to patentability. The filing of this Information Disclosure Statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 11 O.G. 13-25, at 25.

This Information Disclosure Statement is being filed within three months of the filing date of a national application other than a continued prosecution application, within three months of the date of entry of a national stage, before the mailing date of a first Office action on the merits, or before the mailing date of a first Office action after the filing date of request for continued examination. 37 C.F.R. § 1.97(b). No fee is required.

In accordance with M.P.E.P. §2001.06(b), the Examiner's attention is directed to co-pending U.S. Patent Application Nos.: 09/189,543, filed November 10, 1998; 09/344,526, filed June 24, 1999; 09/473,904, filed December 28, 1999; 09/493,741, filed January 28, 2000; 09/499,798, filed February 8, 2000; 09/553,993, filed April 20, 2000;

09/606,369, filed June 28, 2000; 09/636,387, filed August 9, 2000; 09/642,068, filed August 18, 2000; 09/748,706, filed December 22, 2000; 09/785,514, filed February 16, 2001; 09/881,052, filed June 13, 2001; 09/925,941, filed August 9, 2001; 09/979,236, filed November 20, 2001; 09/979,247, filed April 15, 2002; 09/990,890, filed November 21, 2001; 10/187,321, filed June 28, 2002; 10/194,912, filed July 12, 2002; 10/334,416, filed December 31, 2002; 10/352,779 filed January 27, 2003; 10/363,240, filed March 4, 2003; 10/651,568, filed August 29, 2003; 10/648,848, filed August 21, 2003; 10/759,576, filed January 16, 2004, which applications are directed to related technical subject matter. The identification of this U.S. Patent Application is not to be construed as a waiver of secrecy as to that application now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited application and the art cited therein during examination.

The Commissioner is hereby authorized to charge any underpayment of fees associated with this communication, including any necessary fees for extension of time, or credit any overpayment to Deposit Account No. 50-2319 (Matter No. 469249-00405; Docket No. A-72075/RMS/VEJ).

Respectfully submitted,

Date: 4/24/2004

By:

Victor E. Johnson, Reg. No. 41,546 /for/ Robin M. Silva, Reg. No. 38,304 Filed Under 37 C.F.R. § 1.34(a)

Attorney Docket No. A-72075/RMS/VEJ Attorney Matter No. 469249-00405 Application No. 10/762,931

DORSEY & WHITNEY LLP Four Embarcadero Center, Suite 3400 San Francisco, CA 94111-4187 Telephone: (415) 781-1989 Facsimile: (415) 398-3249

Attachments: Form PTO/SB/8A-B, Substitute for Form PTO-1449 International Search Report

161 cited references Return Postcard

Substitute PTO/SB/08A (08-03) AU6 2 6 2004 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE. Substitute(8) form 1449A/PTO · Complete if Known lodified) 10/762,931 Application Number INFORMATION DISCLOSURE Filing Date January 21, 2004 STATEMENT BY APPLICANT First Named Inventor **HEINER**, David Art Unit 1764 (use as many sheets as necessary) **Examiner Name** To Be Assigned Sheet 1 of 13 Attorney Docket Number A-72075/RMS/VEJ (469249-00405)

U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Releva Passages or Relevant Figures Appear		
	A1	3,586,484	06-22-1971	Anderson II, et al.			
	A2	3,748,975	07-31-1973	Tarabocchia			
	A3	4,200,110	04-29-1980	Peterson et al.			
	A4	4,448,485	05-15-1984	Bergman et al.			
	A5	4,499,052	02-12-1985	Fulwyler			
	A6	4,682,895	07-28-1987	Costello			
	A7	4,721,769	01-26-1988	Rubner			
	A8	4,729,949	03-08-1988	Weinreb et al.			
	A9	4,772,540	09-20-1988	Deutsch et al.			
	A10	4,785,814	11-22-1988	Kane			
	A11	4,822,746	04-18-1989	Walt			
	A12	4,824,789	04-25-1989	Yafuso et al.			
	A13	4,842,783	06-27-1989	Blaylock			
	A14	4,868,130	09-19-1989 ·	Hargeaves			
	A15	4,879,097	11-07-1989	Whitehead et al.			
	A16	4,894,343	01-16-1990	Tanaka et al.			
	A17	4,895,805	01-23-1990	Sato et al.			
	A18	4,981,783	01-01-1991	Augenlicht			
	A19	4,999,306	03-12-1991	Yafuso et al.			
	A20	5,002,867	03-26-1991	Macevicz			
	A21	5,015,843	05-14-1991	Seitz et al.			
	A22	5,019,350	05-25-1991	Rhum et al.			
	A23	5,026,599	06-25-1991	Koskenmaki	·		
	A24	5,061,336	10-29-1991	Soane			
	A25	5,071,531	12-10-1991	Soane			
	A26	5,105,305	04-14-1992	Betzig et al.			
	A27	5,110,745	05-05-1992	Kricka et al.			
	A28	5,132,242	07-21-1992	Cheung			
	A29	5,135,627	08-04-1992	soane			
	A30	5,143,853	09-01-1992	Walt			
	A31	5,152,287	10-06-1992	Kane			
	A32	5,176,881	01-05-1993	Sepaniak et al.			
	A33	5,177,012	01-05-1993	Kim et al.			
	A34	5,185,178	02-09-1993	Koskenmaki			
	A35	5,185,243	02-09-1993	Ullman et al.			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional).

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Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

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Gif possible.

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•	Substitute for for		√PTO ·	Complete if Known		
	(Modified)			Application Number	10/762,931	
INFORMATION DISCLOSURE				Filing Date	January 21, 2004	
S'	STATEMENT BY APPLICANT			First Named Inventor	HEINER, David	
				Art Unit	1764	
	(use as many sheets as necessary)			Examiner Name	To Be Assigned	
Sheet	2	of	13	Attorney Docket Number	A-72075/RMS/VEJ (469249-00405)	

			U.S. PATENT (OCUMENTS	
Examiner Initials*	ials* Number-Kind Code ² (if known)		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A36	5,194,300	03-16-1993	Cheung	
	A37	5,222,092	06-22-1996	Hench et al.	
	A38	5,244,636	09-14-1993	Walt et al.	
	A39	5,244,813	09-14-1993	Walt et al.	
	A40	5,250,264	10-05-1993	Walt et al.	
	A41	5,252,494	12-21-1993	Weinreb et al.	
	A42	5,296,375	03-22-1994	Kricka et al.	
	A43	5,298,741	03-29-1994	Walt et al.	
	A44	5,302,509	04-12-1994	Cheeseman	
	A45	5,304,487	04-19-1994	Wilding et al.	
	A46	5,308,771	05-03-1994	Zhou et al.	
	A47	5,310,674	05-10-1994	Weinreb et al.	
	A48	5,320,814	06-14-1994	Walt et al.	
	A49	5,338,831	08-16-1994	Lebl et al.	
	A50	5,342,585	08-30-1994	Lebi et al.	
	A51	5,342,737	08-30-1994	Georger, Jr., et al.	
	A52	5,357,590	10-18-1994	Auracher	
	A53	5,481,629	01-02-1996	Tabuchi	
	A54	5,486,335	01-23-1996	Wilding et al.	
	A55	5,494,798	02-27-1996	Gerdt et al.	
	A56	5,496,997	03-05-1996	Pope	
	A57	5,498,392	03-12-1996	Wilding et al.	
	A58	5,506,141	04-09-1996	Weinreb et al.	·
	A59	5,512,490	04-30-1996	Walt et al.	
	A60	5,516,635	05-14-1996	Ekins et al.	
	A61	5,518,863	05-21-1996	Pawluczyk	
	A62	5,537,000	07-16-1996	Alivisatos et al.	
	A63	5,541,311	07-30-1996	Dahlberg et al.	
	A64	5,545,531	08-13-1996	Rava et al.	
	A65	5,554,516	09-10-1996	Kacian et al.	
	A66	5,585,069	12-17-1996	Zanzucchi et al.	
	A67	5,587,128	12-24-1996	Wilding et al.	
	A68	5,589,351	12-31-1996	Harootunian	
	A69	5,593,838	01-14-1997	Zanzucchi et al.	

Examiner Signature	Date Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

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Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. See Finds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

Skind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.

must precede the senal number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English Language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the complete application form to the USPTO. Time will vary depending on the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevan Passages or Relevant Figures Appear
	A70	5,595,915	01-21-1997	Geysan	
	A71	5,603,351	02-18-1997	Cherukuri et al.	
	A72	5,604,097	02-18-1997	Brenner	
	A73	5,610,287	03-11-1997	Nikiforov	
	A74		05-20-1997		
	A75	5,631,170 5,631,337	05-20-1997	Attridge Sassi et al.	
	A76		05-27-1997	Zanzucchi et al.	
		5,632,876			
	A77	5,632,957	05-27-1997	Heller et al.	
	A78	5,633,972	05-27-1997	Wilding et al.	
	A79	5,637,469	06-10-1997	Wilding et al.	
	A80	5,639,603	06-17-1997	Dower et al.	
	A81	5,640,234	06-17-1997	Roth et al.	
	A82	5,643,738	07-01-1997	Zanzucchi et al.	
	A83	5,647,030	07-08-1997	Jorgensen et al.	
	A84	5,649,576	07-22-1997	Kirk et al.	
	A85	5,656,241	08-12-1997	Seifert et al.	
	A86	5,656,815	08-12-1997	Justus et al.	
	A87	5,671,303	09-23-1997	Shieh et al.	
	A88	5,674,698	10-07-1997	Zarling	
	A89	5,677,196	10-14-1997	Herron et al.	
	A90	5,681,484	10-28-1997	Zanzucchi et al.	
	A91	5,690,894	11-25-1997	Pinkel et al.	
	A92	5,702,915	12-30-1997	Miyamoto	
	A93	5,714,330	02-03-1998	Brenner et al.	
	A94	5,726,026	03-10-1998	Wilding et al.	
	A95	5,747,169	05-05-1998	Fan et al.	
	A96	5,747,180	05-05-1998	Miller et al.	
	A97	5,750,015	05-12-1998	Soane et al.	
	A98	5,751,018	05-12-1998	Alivisatos et al.	
	A99	5,755,942	05-26-1998	Zanzucchi et al.	
	A100	5,763,175	06-09-1998	Brenner	
••••	A101	5,770,029	06-23-1998	Nelson et al.	
	A102	5,770,157	06-23-1998	Cargill	
	A103	5,780,231	07-14-1998	Brenner	
	A104	5,795,714	08-18-1998	Cantor et al.	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

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Skind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English Language Translation is attached.

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Complete if Known Substitute for form 1449A/PTO . (Modified) Application Number 10/762,931 INFORMATION DISCLOSURE January 21, 2004 Filing Date STATEMENT BY APPLICANT First Named Inventor **HEINER**, David Art Unit 1764 (use as many sheets as necessary) To Be Assigned Examiner Name A-72075/RMS/VEJ (469249-00405) 13 Sheet 4 Attorney Docket Number of

U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Releva Passages or Relevant Figures Appear		
	A105	5,795,716	08-18-1998	Chee et al.			
	A106	5,814,524	09-29-1998	Walt et al.			
	A107	5,830,711	11-03-1998	Barany et al.			
	A108	5,837,196	11-17-1998	Pinkel et al.			
	A109	5,840,256	11-24-1998	Demers et al.			
	A110 *	5,843,655	12-01-1998	McGall			
	A111	5,846,842	12-08-1998	Herron et al.			
	A112	5,849,215	12-15-1998	Gin et al.			
	A113	5,854,033	12-29-1998	Lizardi			
	A114	5,854,684	12-29-1998	Stabile et al.			
	A115	5,856,083	01-05-1999	Chelsky et al.			
	A116	5,858,732	01-05-1999	Solomon et al.			
	A117	5,863,708	01-26-1999	Zanzucchi et al.			
	A118	5,863,722	01-26-1999	Brenner			
	A119	5,866,331	02-02-1999	Singer et al.			
	A120	5,874,219	02-23-1999	Rava et al.			
	A121	5,876,924	03-02-1999	Zhang et al.			
	A122	5,881,200	03-09-1999	Burt			
	A123	5,888,885	03-30-1999	Xie			
	A124	5,900,481	05-04-1999	Lough et al.			
	A125	6,005,707	12-21-1999	Berggren et al.			
	A126	6,008,892	12-28-1999	Kain et al	· · · · · · · · · · · · · · · · · · ·		
	A127	6,023,540	02-08-2000	Walt et al.			
	A128	6,027,889	02-22-2000	Barany et al.	•		
	A129	6,037,186	03-14-2000	Stimpsom			
	A130	6,039,894	03-21-2000	Sanjurjo et al.			
	A131	6,045,760	04-04-2000	Aizawa et al.			
	A132	6,051,380	04-18-2000	Sosnowski et al.			
	A132	6,054,564	04-18-2000	Barany et al.			
					· ·		
-	A134	6,071,748	06-06-2000	Modin et al.			
	A135	6,074,754	06-13-2000	Jacobson et al	-		
	A136	6,083,763	07-04-2000	Balch			
	A137	6,087,114	07-11-2000	Rider			

Examiner Signature	Date Considered	

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•	Substitute for for		PTO ·		Complete if Known		
	(Modif	tied)		Application Number	10/762,931		
	FORMATION			Filing Date	January 21, 2004		
ST	STATEMENT BY APPLICANT			First Named Inventor	HEINER, David		
				Art Unit	1764		
	(use as many sheets as necessary)			Examiner Name	To Be Assigned		
Sheet	5	of	13	Attorney Docket Number	A-72075/RMS/VEJ (469249-00405)		

	U.S. PATENT DOCUMENTS							
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	A138	6,090,549	07-18-2000	Mirzabekov et al.				
	A139	6,096,496	08-01-2000	Frankel				
	A140	6,100,973	08-08-2000	Lawandy				
	A141	6,121,054	09-19-2000	Lebi				
	A142	6,121,075	09-19-2000	Yamashita				
	A143	6,129,896	10-10-2000	Noonan et al				
	A144 *	6,130,046	10-10-2000	Smith et al.				
	A145	6,139,626	10-31-2000	Norris et al.				
	A146	6,172,218 B1	01-09-2001	Brenner				
	A147	6,200,737	03-13-2001	Walt et al.				
	A148	6,207,392 B1	03-27-2001	Weiss et al.				
	A149	6,210,910 B1	04-03-2001	Walt et al.				
	A150	6,251,639 B1	06-26-2001	Kurn				
	A151	6,261,782 B1	07-17-2001	Lizardi et al.				
	A152	6,266,459 B1	07-24-2001	Walt et al.				
	A153	6,268,147 B1	07-31-2001	Beattie et al				
	A154	6,268,148,B1	07-31-2001	Barany et al.				
	A155	6,274,323 B1	08-14-2001	Bruchez et al.	·			
	A156	6,280,935 B1	08-28-2001	Macevicz				
=	A157	6,306,643 B1	10-23-2001	Gentalen et al.				
	A158	6,327,410 B1	12-04-2001	Walt et al.				
	A159	6,355,431 B1	03-12-2002	Chee et al.				
	A160	6,663,832 B2	12-16-2003	Lebl et al.				
	A161	2003/0016897 A1	01-23-2003	Walt et al.				

FOREIGN PATENT DOCUMENTS									
Cité No. Country Codof Number? Kind Codo		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T°				
-	B1	EP 0 039 888 B1	11-18-1981	Schloemann Siemag AG					
	B2	EP 0 392 546 A2	10-17-1990	Ro Institut Za Molekularnu Genetik I Geneticko Inzenjerstvo					
	B3	EP 0 539 888 A1	05-05-1993	Shimadzu Corp.					

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	(Modi	ified)		Application Number	10/762,931	
IN.	IFORMATION	DISC	CLOSURE	Filing Date	January 21, 2004	
S	STATEMENT BY APPLICANT			First Named Inventor	HEINER, David	
				Art Unit	1764	
	(use as many sheets as necessary)			Examiner Name	To Be Assigned	
Sheet	6	of	13	Attorney Docket Number	A-72075/RMS/VEJ (469249-00405)	

	FOREIGN PATENT DOCUMENTS										
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ² Number ⁴ Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T⁵					
	B4	EP 0 572 157 A1	12-01-1993	Puritan-Bennett Corp.							
	B5	EP 0 799 897 A1	10-08-1997	Affymetrix, Inc.							
	B6 *	EP 1 128 310 A2/A3	08-29-2001	Agilent Technologies, Inc.							
	B7	FR 2 741 357 A1	05-23-1997	Corning Inc.							
	B8	GB 2 294 319 A	04-24-1996	Cambridge Imaging Ltd.							
	В9	GB 2 315 130 A	01-21-1998	Cambridge Imaging Ltd.							
	B10	GB 2 315 131 A	01-21-1998	Cambridge Imaging Ltd.							
	B11	WO 90/09885 A1	09-07-1990	E.I. DuPont de Nemours & Co.							
	B12	WO 93/18434 A1	09-16-1993	E.I. Du Pont de Nemours & Co.							
	B13	WO 93/25563 A1	12-23-1993	City of Hope							
	B14	WO 94/12863 A1	06-09-1994	Trustees of Tufts College							
	B15	WO 95/21271 A1	08-10-1995	Molecular Tool, Inc.							
	B16	WO 95/33070 A1	12-07-1995	New York Medical College							
	B17	WO 96/03212 A1	02-08-1996	Brenner, Sydney							
	B18	WO 96/04547 A1	02-15-1996	Lockheed Martin Energy Systems, Inc.							
	B19	WO 96/15271 A1	05-23-1996	Abbott Laboratories							
	B20	WO 96/36436 A1	11-21-1996	Irori		1					
	B21	WO 97/12030 A1	04-03-1997	Nanogen, Inc.		1					
	B22	WO 97/13870 A1	04-17-1997	Heller, Adam							
	B23	WO 97/14028 A2, A3	04-17-1997	Luminex Corp.							
-	B24	WO 97/31256 A2, A3	08-28-1997	Cornell Res. Foundation, Inc.							
	B25	WO 97/45559 A1	12-04-1997	Cornell Res. Foundation, Inc.							
	B26	WO 97/46704 A1	12-11-1997	Lynx Therapeutics, Inc.		\top					
	B27	WO 98/08092 A1	02-28-1998	SmithKline Beecham Corp.							
	B28	WO 98/13523 A1	04-02-1998	Pyrosequencing AB							
	B29	WO 98/29736 A1	07-09-1998	Genometrix Inc.							
	B30	WO 98/31836 A1	07-23-1998	Hyseq, Inc.							
	B31	WO 98/40726 A1	09-17-1998	Trustees of Tufts College							

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S	TATEMENT B	Y AF	PLICANT	First Named Inventor	HEINER, David	
				Art Unit	1764	
(use as many sheets as necessary)				Examiner Name	To Be Assigned	
Sheet	7	of	13	Attorney Docket Number	A-72075/RMS/VEJ (469249-00405)	

			FOREIGN PATEN	T DOCUMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ² Number ⁴ Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Te
	B32	WO 98/46797 A1	10-22-1998	Immunological Associates of Denver		
	B33	WO 98/50782 A2, A3	11-12-1998	Trustees of Tufts College		
	B34	WO 98/53093 A1	11-26-1998	Bioarray Solutions LLC		
	B35	WO 99/00663 A1	01-07-1999	California Institute of Technology		
•	B36 *	WO 99/04228 A2/A3	01-28-1999	LJL BioSystems, Inc.		
	B37	WO 99/05320 A1	02-04-1999	Rapigene, Inc.		
	B38	WO 99/09394 A1	02-25-1999	Alexion Pharmaceuticals, Inc.		
	B39	WO 99/18434 A1	04-15-1999	Trustees of Tufts College		
	B40	WO 99/34931 A1	07-15-1999	Cartesian Technologies, Inc.		
	B41	WO 99/39001 A2	08-05-1999	Amersham Pharmacia Biotech AB		
	B42	WO 99/64867 A1	12-16-1999	Amersham Pharmacia Biotech UK Ltd.		
	B43	WO 99/67414 A1	12-29-1999	Glaxo Group Ltd.		
	B44	WO 00/04372 A1	01-27-2000	The Board of Regents of the University of Texas System		
	B45	WO 00/39587 A1	07-06-2000	Illumina, Inc.		
	B46	WO 00/44491 A2/A3	08-03-2000	Illumina, Inc.	·	
	B47	WO 00/47767 A1	08-17-2000	AstraZeneca UK Ltd.		\Box
	B48	WO 00/47996 A2/A3	08-17-2000	Illumina, Inc.		
	B49 *	WO 02/04123 A1	01-17-2002	Robodesign International, Inc.		
	B50 *	WO 02/16040 A1	02-28-2002	The University of Chicago		

NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶				
	C1	ABEL, A.P., et al., "Fiber-optic evanescent wave biosensor of oligonucleotides," <i>Anal. Chem.</i> 68(17):2905-2912 (Sep. 1996).					
	C2	ANGEL, S.M., "Optrodes: Chemically Selective Fiber-Optic Sensors," Spectroscopy 2(4):38-47 (1987).					
	СЗ	BARNARD, S.M., et al., "Fiber-optic organic vapor sensor," Environ. Sci. Technol. 25(7):1301-1304 (Jul. 1991).					

			
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				Art Unit	1764		
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	C4	BEN-DOR, A, et al., "Universal DNA Tag Systems: A combinatorial design scheme," J. Comput. Biol. 7(3/4):503-519 (2000).					
-	C5	BIRINDELLI, S., et al., "Letter to the Editor: Comments on Adaptation of the Cellscan Technique for the SCM Test in Breast Cancer Rahmani et al., Eur. J. Cancer, 32A, No. 10, pp. 1758-1765 1996," Eur. J. Cancer 33(8):1333-1334 (Jul. 1997).					
	C6	CAREY, W.P., et al., "Chemical piezoelectric sensor and sensor array characterization," <i>Anal. Chem.</i> 58(14):3077-3084 (Dec. 1986).					
	C7	CASTAÑO, J.P., et al., "Dynamic Monitoring and Quantification of Gene Expression in Single, Living Cells: A Molecular Basis for Secretory Cell Heterogeneity," <i>Mol. Endocrinol.</i> 10(5):599-605 (May 1996).					
	C8	CHEN, G., et al., "Observation and Quantitation of Exocytosis from the Cell Body of a Fully Developed Neuron in Planorbis corneus," <i>J. Neurosci.</i> 15(11):7747-7755 (Nov. 1995).					
	C9	CHEN, J., et al., "A Microsphere-Based Assay for Multiplexed Single Nucleotide Polymorphism Analysis Using Single Base Chain Extension," <i>Genome Res.</i> 10(4):549-557 (Apr. 2000).	-				
	C10	CHIAVAROLI, C., et al., "Simultaneous Monitoring of Cystosolic Free Calcium and Exocytosis at the Single Cell Level," J. Neuroendocrinol. 3(3):253-260 (Mar. 1991).					
	CLARK, R.A., et al., "Electrochemical analysis in picoliter microvials," <i>Anal. Chem.</i> 69(2):259-263 (January 2011)						
	C12	CZARNIK, A., "Illuminating the SNP Genomic Code," Mod. Drug Disc. 1(2):49-55 (1998).					
	C13	DANIELSON, E., et al., "A combinatorial approach to the discovery and optimization of luminescent materials," Nature 389(6654):944-948 (Oct. 1997).	•				
	C14	DeFOREST, W.S., Photoresist Materials and Processes, McGraw-Hill Book Co.: New York, NY (1975).	·				
	C15	DEUTSCH, M., et al., "Apparatus for high-precision repetitive sequential optical measurement of living cells," Cytometry 16(3):214-216 (Jul. 1994).					
	C16	DICKINSON, T., et al., "Generating sensor diversity through combinatorial polymer synthesis," <i>Anal. Chem.</i> 69(17):3413-3418 (Sep. 1997).					
	C17	DiMARCO, G., et al., "Luminescent Ru11-polypyridine complexes in poly-2-hydroxyethylmetharcrylate matrices as oxygen sensors," <i>Adv. Mater.</i> 7(5) (1995).					
	C18	DOYLE, R., "High-Temperature Sample Holder for Fast-Atom Bombardment Mass Spectrometry of Molten Materials," <i>Anal. Chem.</i> 59(3):537-539 (Feb. 1987).					
	C19	DRMANAC, R., et al., "Prospects for a miniaturized, simplified and frugal human genome project," <i>Scientia Yugoslavica</i> 16(1-2):97-107 (1990).					
	C20	DRMANAC, R., et al., "Sequencing of megabase plus DNA by hybridization: theory of the method," <i>Genomics</i> 4(2):114-128 (Feb. 1989).					
	C21	DRMANAC, R., et al., "Sequencing by Hybridization (SBH) with Oligonucleotide Probes as an Integral Approach for the Analysis of Complex Genomes," <i>Intl. J. Gen. Res.</i> 1(1):59-79 (1992).					
	C22	DRMANAC, R., et al., "Sequencing by Hybridization," <i>Automated DNA Sequencing and Analysis</i> , M. Adams et al. (eds.) (1994).					
Examir Signati		Date Considered					

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	C23	DRMANAC, R., et al., "Sequencing by Oligonucleotide Hybridization: A Promising Framework in Decoding of the Genome Program," <i>The 1st Intl. Conf. Electrophoresis Supercomputing and the Human Genome</i> , Proceeding of the April 10-13, 1990 Conference, Florida State University (Cantor, C., and Lim, H., eds).	
	C24	EGNER, B.J., et al., "Tagging in combinatorial chemistry: the use of coloured and fluorescent beads," <i>Chem. Commun.</i> 8:735-736 (1997).	
	C25	FAN, J.B., et al., "Parallel genotyping of human SNPs using generic high-density oligonucleotide tag arrays," Genome Res. 10(6):853-860 (Jun. 2000).	
	C26	FERGUSON, J.A., et al., "A fiber-optic DNA biosensor microarray for the analysis of gene expression," <i>Nat. Biotechnol.</i> 14(12):1681-1684 (Dec. 1996).	
	C27	FODOR, S., et al., "Light-directed, spatially addressable parallel chemical synthesis," <i>Science</i> 251(4995):767-773 (Feb. 1991).	
	C28	FREEMAN, T., et al., "Oxygen probe based on tetrakis(alkylamino)ethylene-Chemiluminescence," <i>Anal. Chem.</i> 53(1):98-102 (Jan. 1981).	
	C29	FUH, M., "Single Fibre Optic Fluorescence pH Probe," Analyst 112():1159-1163 (1987).	
	C30	GAUCI, M.R., et al., "Observation of Single-Cell Fluorescence Spectra in Laser Flow Cytometry," Cytometry 25(4):388-393 (Dec. 1996).	
	C31	GERRY, N.P., et al., "Universal DNA microarray method for multiplex detection of low abundance point mutations," J. Mol. Biol. 292(2):251-262 (Sep. 1999).	
	C32	GRATE, J., et al., "Method for estimating polymer-coated acoustic wave vapor sensor responses," <i>Anal. Chem.</i> 67(13):2162-2169 (Jul. 1995).	
	C33	GRATE, J., et al., "Solubility properties of siloxane polymers for chemical sensors," <i>Proc. SPIE</i> 2574:71-77 (1995).	
	C34	GRIME, G.W., "Holographic Diffraction Gratings Recorded in Photoresist," Non-Silver Photographic Processes, Proc. Symp. Non-Silver Photogr. Processes, Oxford College: Oxford, GB, pp. 275-284 (Sep. 1973).	
	C35	GUNDERSON, K.L., "Mutation detection by ligation to complete n-mer DNA arrays," Genome Res. 8(11):1142-1153 (Nov. 1998).	
	C36	HAFEMAN, D.G., et al., "Light-addressable potentiometric sensor for biochemical systems," <i>Science</i> 240(4856):1182-1184 (May 1988).	
	C37	HEALEY, B., et al., "Improved fiber-optic chemical sensor for penicillin," <i>Anal. Chem.</i> 67(24):4471-4476 (Dec. 1995).	
	C38	HIRSCHFELD, T., et al., "Laser Fiber-Optic 'Optrode' for Real Time In Vivo Blood Carbon Dioxide Level Monitoring," J. Lightwave Technol. LT-5(7):1027-1033 (1987).	
	C39	HIRSCHHORN, J.N., et al., "SBE-TAGS: an array-based method for efficient single-nucleotide polymorphism genotyping," <i>Proc. Natl. Acad. Sci. USA</i> 97(22):12164-12169 (Oct. 2000).	
	C40	HOGAN, B.L., et al., "Single-cell analysis at the level of a single human erythrocyte," <i>Trends Anal. Chem.</i> 12(1):4-9 (1993).	

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	C41	HSUIH, T., et al., "Novel, ligation-dependent PCR assay for detection of hepatitis C virus in serum," <i>J. Clin. Microbiol.</i> 34(3):501-507 (Mar. 1996).	
	C42	HUANG, L., et al., "Exploring single-cell dynamics using chemically-modified microelectrodes," <i>Trends Anal. Chem.</i> 14(4):158-164 (1995).	
	C43	HUBERT, C., et al., "Design of solvatochromic polymer-based fiber optics chemical sensor for polar solvent detection," <i>Adv. Mater.</i> 7(11):914-917 (1995).	
	C44	HUGHES, K.D., et al., "Fluorescence Imaging of Whole Microorganisms with Scientific Grade CCDS," Royal Soc. Chem. (GB) 194:184-189 (1996).	
•	C45	HUGHES, K.D., et al., "New Fluorescence Tools for Investigating Enzyme Activity," Anal. Chim. Acta 307:393-402 (1995).	
-	C46	INCE, C., et al., "A micro-perfusion chamber for single-cell fluorescence measurements," <i>J. Immunol. Meth.</i> 128(2):227-234 (Apr. 1990).	
	C47	JACOBS, J., et al., "Combinatorial chemistry - applications of light-directed chemical synthesis," <i>Trends Biotechnol.</i> 12(1):19-26 (Jan. 1994).	
	C48	KOOP, A., et al., "Continuous bioluminescent monitoring of cytoplasmic ATP in single isolated rat hepatocytes during metaboli poisoning," <i>Biochem. J.</i> 295(Pt. 1):165-170 (Oct. 1993).	
	C49	LAM, K.S., "The 'one-bead-one-compound' combinatorial library method," Chem. Rev. 97(2):411-448 (Apr. 1997).	
	C50	LEVY, U., et al., "Direct picture transmission in a single optical fiber with holographic filters," <i>Optics Commun.</i> 30(2):163-165 (1979).	
	C51	LIN, V.S., et al., "A porous silicon-based optical interferometric bionsensor," <i>Science</i> 278(5339):840-843 (Oct. 1997).	
	C52	LIN, Z., et al., "Multiplex genotype determination at a large number of gene loci," <i>Proc. Natl. Acad. Sci. USA</i> 93(6):2582-2587 (Mar. 1996).	
	C53	LIPPITSCH, M., et al., "Fibre-optic oxygen sensor with the fluorescence decay time as the information center," Anal. Chim. Acta 205():1-6 (1998).	
	C54	LIZARDI, P., et al., "Mutation detection and single-molecule counting using isothermal rolling-circle amplification," <i>Nat. Genet.</i> 19(3):225-232 (Jul. 1998).	
	C55	LONERGAN, M.C., "Array-based vapor sensing using chemically sensitive, polymer composite resistors," Conf. Proc., IEEE Aerospace Appl. 3(8):583-631 (1997).	
	C56	LUNDSTRÖM, I., et al., "Why bother about gas-sensitive field-effect devices?" Sens. Actuators ():75-82 (1996).	
	C57	LUONG, J.H.T., et al., "Fluorescence Sensors for Monitoring Bioprocesses," <i>Practical Fluorescence</i> , 2 nd ed., G.G. Guibault (ed.), 775-793, Marcel Dekker & Co.: New York, NY: (1990).	
	C58	MATTHEWS, J., et al., "Analytical strategies for the use of DNA probes," Anal. Biochem. 169(1):1-25 (Feb. 1988).	
	C59	McCONNELL, H.M., et al., "The Cytocensor Microphysiometer: Biological Applications of Silicon Technology," Science 257(5078):1906-1912 (Sep. 1992).	

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	(Mod			Application Number	10/762,931		
	IFORMATION			Filing Date	January 21, 2004		
S	TATEMENT B	Y AP	PLICANT	First Named Inventor	HEINER, David		
				Art Unit	1764		
	(use as many she	ets as ne	cessary)	Examiner Name	To Be Assigned		
Sheet	11	of	13	Attorney Docket Number	A-72075/RMS/VEJ (469249-00405)		

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	C60	MICHAEL, K., et al., "Fabrication of Micro- and Nanostructures Using Optical Imaging Fibers and Their Use as Chemical Sensors," <i>Proc. 3rd Intl. Symp., Microstructures Microfabricated Systs.</i> , (Hersketh, P.J., et al. (eds.), <i>Electrochem. Soc.</i> 97(5):152-157 (Aug. 1997).	
	C61	MICHAEL, K., et al., "Making sensors out of disarray: optical sensors microarrays," <i>Proc. SPIE</i> 3270:34-41 (1998).	
	C62	MICHAEL, K., et al., "Randomly ordered addressable high-density optical sensor arrays," <i>Anal. Chem.</i> 70(7):1242-1248 (Apr. 1998).	
	C63	MIGNANI, A.G., et al., "In vivo biomedical monitoring by fiber-optic systems," <i>J. Lightwave Technol.</i> 13(7):1396-1406 (1995).	
	C64	MILANOVICH, F., et al., "Clinical measurements using fiber optics and optrodes," SPIE 494:1831 (1984).	
	C65	MIYAWAKI, A., et al., "Fluorescent Indicators for Ca2+ based on green fluorescent proteins and calmodulin," Nature 388(6645):882-887 (Aug. 1997).	
	C66	MRKSICH, M., et al., "Controlling cell attachment of contoured surfaces with self-assembled monolayers of alkanethiolates on gold," <i>Proc. Natl. Acad. Sci. USA</i> 93(20):10775-10778 (Oct. 1996).	
_	C67	MUNKHOLM, C., et al., "Polymer modification of fiber optic sensors as a method of enhancing fluorescence signal for pH measurement," <i>Anal. Chem.</i> 58(7):1427-1430 (Jun. 1986).	
	C68	NORMIE, L., "System Uses Photonics for Early Tumor Detection," <i>Biophotonics Intl.</i> 24-25 (Sep./Oct. 1996).	
	C69	OWICKI, J.C., et al., "Bioassays with a microphysiometer," Nature 344(6263):271-272 (Mar. 1990).	
	C70	OWICKI, J.C., et al., "Continuous monitoring of receptor-mediated changes in the metabolic rates of living cells," <i>Proc. Natl. Acad. Sci. USA</i> 87(10):4007-4011 (May 1990).	
	C71	OWICKI, J.C., et al., "The Light-Addressable Potentiometric Sensor: Principles and Biological Applications," <i>Annu. Rev. Biophys. Biomol. Struct.</i> 23:87-113 (Jun. 1994).	
	C72	PANTANO, P., et al., "Ordered Nanowell Arrays," <i>Chem. Mater.</i> 8(12):2832-2835 (1996).	
	C73	PARCE, J.W., et al., "Biosensors for Directly Measuring Cell Affecting Agents," Annu. Biol. Clin. (Paris) 48(9):639-641 (1990).	
	C74	PARCE, J.W., et al., "Detection of cell-affecting agents with a silicon biosensor," Science 246(4827):243-247 (Oct. 1989).	
	C75	PARK, M., et al., "Block Copolymer Lithography: Periodic Arrays of ~10 ¹¹ Holes in 1 Square Centimeter," Science 276(5317):1401-1404 (May 1997).	
	C76	PETERSON, J.I., et al., "Fiber optic pH probe for physiological use," Anal. Chem. 52(6):864-869 (May 1980).	
	C77	PETERSON, J.I., et al., "Fiber-optic sensors for biomedical applications," Science 224(4645):123-127 (Apr. 1984).	
	C78	PIUNNO, P., et al., "Fiber-optic DNA sensor for fluorometric nucleic acid determination," <i>Anal. Chem.</i> 67(15):2635-2643 (Aug. 1995).	

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Substitute for form 1449A/PTO . Complete if Known (Modified) 10/762,931 Application Number INFORMATION DISCLOSURE Filing Date January 21, 2004 STATEMENT BY APPLICANT First Named Inventor **HEINER**, David Art Unit 1764 (use as many sheets as necessary) **Examiner Name** To Be Assigned Sheet 12 13 A-72075/RMS/VEJ (469249-00405) Attorney Docket Number

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	C79	PLUNKETT, M., et al., "Combinatorial chemistry and new drugs," Sci. Am. 276(4):69-73 (Apr. 1997).	
	C80	POPE, E., "Fiber optic chemical microsensors employing optically active silica microspheres," <i>SPIE Proc.</i> 2388():245-256 (1995).	
	C81	RAHMANI, H., et al., "Adaptation of the Cellscan Technique for the SCM Test in Breast Cancer," <i>Eur. J. Cancer</i> 32A(10):1758-1765 (Sep. 1996).	
	C82	RAMANATHAN, S., et al., "Sensing antimonite and arsenite at the subattomole level with genetically engineered bioluminescent bacteria," <i>Anal. Chem.</i> 69(16):3380-3384 (Aug. 1997).	
	C83	RAPP, M., et al., "Development of an analytical microsystems for organic gas detection based on surface acoustic wave resonators," <i>Fresenius J. Anal. Chem.</i> 352(7):699-704 (1995).	
-	C84	REGNIER, F.E., et al., "Electrophoretically-mediated microanalysis (EMMA)," <i>Trends Anal. Chem.</i> 14(4):177-181 (1995).	
	C85	ROSENZWEIG, Z., et al., "Analytical properties of miniaturized oxygen and glucose fiber optic sensors," Sens. Actuators B(35-36):475-483 (1996).	
	C86	SAARI, L., et al., "pH sensor based on immobilized fluoresceinamine," Anal. Chem. 54(4):821-823 (Apr. 1982).	
·	C87	SCHWAB, S., et al., "Versatile, Efficient Raman Sampling with Fiber Optics," Anal. Chem. 56(12):2199-2204 (Oct. 1984).	
	C88	SEITZ, W.R., "Chemical sensors based on fiber optics," <i>Anal. Chem.</i> 56(1):16A-34A (Jan. 1984).	
	C89	SHEAR, J.B., et al., "Single cells as biosensors for chemical separations," <i>Science</i> 267(5194):74-77 (Jan. 1995).	
	C90	SHOEMAKER, D., et al., "Quantitative phenotypic analysis of yeast deletion mutants using a highly parallel molecular bar-coding strategy," <i>Nat. Genet.</i> 14(4):450-456 (Dec. 1996).	
	C91	STILL, W.C., "Discovery of the sequence-selective peptide binding by synthetic receptors using encoded combinatorial libraries," <i>Acc. Chem. Res.</i> 29(3):155-163 (Mar. 1996).	
,	C92	STRACHAN, N., et al., ""A rapid general method for the identification of PCR products using a fibre-optic biosensor and its application to the detection of Listeria," <i>Lett. Appl. Microbiol.</i> 21(1):5-9 (Jul. 1995).	
	C93	SYVÄNEN, A., et al., "Detection of point mutations in human genes by the solid-phase minisequencing method," Clin. Chim. Acta 226(2):225-236 (May 1994).	
-	C94	TONG, W., et al., "Monitoring single-cell pharmacokinetics by capillary electrophoresis and laser-induced native fluorescence," <i>J. Chromatogr. B</i> 689(2):321-325 (Feb. 1997).	
	C95	TSIEN, R.Y., "Fluorescent Probes of Cell Signaling," Annu. Rev. Neurosci. 12():227-253 (1989).	
	C96	VENTON, D., et al., "Screening combinatorial libraries," <i>Chemometrics and Intelligent Laboratory Systems</i> , pp. 131-150, Elsevier Science Publishers: Amsterdam, NL (1999).	
	C97	VERGNE, I., et al., "Phagosomal pH determination by duel fluorescence flow cytometry," <i>Anal. Biochem.</i> 255(1):127-132 (Jan. 1998).	

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S	TATEMENT B	Y AF	PLICANT	First Named Inventor	HEINER, David	
				Art Unit	1764	
	(use as many shee	ets as ne	cessary)	Examiner Name	To Be Assigned	
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	C98	WALT, D., "Fiber Optic Imaging Sensors," Acc. Chem. Res. 31(5):267-278 (1998).				
	C99	WALT, D., "Fiber-optic sensors for continuous clinical monitoring," <i>Proc. IEEE</i> 80(6):903-911 (1992).				
	C100	WALT, D., et al., "Design, Preparation, and Applications of Fiber-Optic Chemical Sensors for Continuous Monitoring," Chemical Sensors and Microinstrumentation, Amer. Chem. Soc. Symp. 403:252-272 (1989).				
	C101	WHITE, J., et al., "Rapid analyte recognition in a device based on optical sensors and the olfactory system," <i>Anal. Chem.</i> 68(13):2191-2201 (Jul. 1996).				
	C102	WIGHTMAN, R.M., et al., "Temporally resolved catechollamines spikes correspond to single vesicle release from individual chromaffin," <i>Proc. Natl. Acad. Sci. USA</i> 88(23):10754-10758 (Dec. 1991).				
	C103	WOLFBEIS, O.S., "Fiber Optical Fluorosensors in Analytical and Clinical Chemistry," <i>Molecular Luminescence Spectroscopy, Methods and Applications</i> , Schulman (ed.), Wiley & Sons: New York, NY (1988).				
	C104	WOLFBEIS, O.S., et al., "Fiber-optic fluorosensor for oxygen and carbon dioxide," <i>Anal. Chem.</i> 60(19):2028-2030 (Oct. 1988).				
	C105	WONG, K., et al., "Simultaneous monitoring of gluthathione and major proteins in single erythrocytes," <i>Mikrochim. Acta</i> 120:321-327 (1995).				
	C106	XIANG, X., et al., "A combinatorial approach to materials discovery," Science 269(5218):1738-1740 (Jun. 1995).				
	C107	YEUNG, E.S., "Chemical Analysis of Single Human Erythrocytes," Acc. Chem. Res. 27:409-414 (1994).				
	C108	ZARE, R.N., "Making a Biosensor from a Cell and a Fluorescent Dye," <i>Biophotonics Intl.</i> 3:17 (Mar./Apr. 1995).				
	C109	ZELLERS, E., et al., "Optimal coating selection for the analysis of organic vapor mixtures with polymer-coated surface acoustic wave sensor arrays," <i>Anal. Chem.</i> 67(6):1092-1106 (Mar. 1995).				
	C110	ZHUJUN, Z., et al., "A Fluorescence Sensor for Quantifying pH in the Range for 6.5 to 8.5," Anal. Chim. Acta 160:47-55 (1984).				
	C111	ZURGIL, N., et al., "Intracellular Fluorescence Polarization Measurements with the Cellscan System: Detection of Cellular Activity in Autoimmune Disorders," <i>Isr. J. Med. Sci.</i> 33(4):273-279 (Apr. 1997).				

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